#### MAIL TO:

STATE OF UTAH
DIVISION OF PURCHASING
3150 STATE OFFICE BUILDING, STATE CAPITOL
P.O. BOX 141061
SALT LAKE CITY, UTAH 84114-1061
TELEPHONE (801) 538-3026
http://www.purchasing.state.ut.us

# **Request for Proposal**



Solicitation Number: NO3008

Due Date: 09/24/02 at 3:00 P.M.

Date Sent: August 22, 2002

# **Agency Contract**

Goods and services to be purchased:

REQUEST FOR STATEMENT OF INTEREST FOR TMDL WATER QUALITY STUDY OF ECHO RESERVOIR

## Please complete

Company Name		Federal Tax Identification Number				
Ordering Address	City	State	Zip Code			
Remittance Address (if different from ordering address)	City	State	Zip Code			
Type  ☐ Corporation ☐ Partnership Proprietorship Government	Company Contact Person					
Telephone Number (include area code)	Fax Number (include area code)					
Company's Internet Web Address	Email Address					
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)					
The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. Please review all documents carefully before completing.  The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in						
Utah. Yes No If no, enter where produced, etc						
Offeror's Authorized Representative's Signature	Date					
Type or Print Name	Position or Title		_			

STATE OF UTAH
DIVISION OF PURCHASING

# **Request for Proposal**

Solicitation Number: NO3008

Due Date: 09/24/02

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REQUEST FOR STATEMENT OF INTEREST FOR TMDL WATER QUALITY STUDY OF ECHO RESERVOIR, PER THE ATTACHED.

# QUESTIONS ON SPECIFICATIONS CALL JOHN WHITEHEAD AT (801) 538-6053.

QUESTIONS ON PURCHASING PROCESS (NOT RELATED TO SPECIFICATIONS) CALL NANCY ORTON AT (801) 538-3148. RX: 480 37000000002

#### **REQUEST FOR PROPOSAL - INSTRUCTIONS AND GENERAL PROVISIONS**

- 1. **PROPOSAL PREPARATION:** (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. (c) Unit price will govern, if there is an error in the extension. (d) Delivery of services as proposed is critical and must be adhered to. (e) Incomplete proposals may be rejected. (f) This proposal may not be withdrawn for a period of 60 days from the due date. (g) Where applicable, all proposals must include complete manufacturer's descriptive literature. (h) By signing the proposal the offeror certifies that all of the information provided is accurate, that they are willing and able to furnish the item(s) specified, and that prices offered are correct.
- 2. **SUBMITTING THE PROPOSAL:** (a) The proposal must be signed in ink, sealed, and if mailed, mailed in a properly-addressed envelope to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061. The "Solicitation Number" and "Due Date" must appear on the outside of the envelope. (b) Proposals, modifications, or corrections received after the closing time on the "Due Date" will be considered late and handled in accordance with the Utah Procurement Rules, section 3-209. (c) Your proposal will be considered only if it is submitted on the forms provided by the state. Facsimile transmission of proposals to DIVISION will not be considered. (d) All prices quoted must be both F.O.B. Origin per paragraph 1.(c) and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the proposal for consideration and approval by the Division of Purchasing & General Services (DIVISION). Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION. No charge for delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose will be paid by the state unless specifically included in the proposal and accepted by DIVISION. (e) By signing the proposal the offeror certifies that all of the information provided is accurate and that he/she offers to furnish materials/services for purchase in strict accordance with he requirements of this proposal including all terms and conditions.
- 3. **BONDS:** The state has the right to require a bid or proposal bond, payment bond and/or a faithful performance bond from the offeror in an amount not to exceed the amount of the contract.
- 4. **PROPRIETARY INFORMATION:** Suppliers are required to mark any specific information contained in their bid which is not to be disclosed to the public or used for purposes other than the evaluation of the bid. Each request for non-disclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any proposal will not be considered proprietary. All material becomes the property of the state and may be returned only at the state's option. Proposals submitted may be reviewed and evaluated by any persons at the discretion of the state.
- 5. **BEST AND FINAL OFFERS:** Discussions may be conducted with offerors who submit proposals determined to be reasonably susceptible of being selected for award for the purpose of assuring full understanding of, and responsiveness to, solicitation requirements. Prior to award, these offerors may be asked to submit best and final offers. In conducting discussions, there shall be no disclosure of any information derived from proposals submitted by a competing offeror.

- 6. **SAMPLES:** Samples, brochures, etc., when required, must be furnished free of expense to the state and if not destroyed by tests may, upon request made at the time the sample is furnished, be returned at the offeror's expense.
- 7. **DIVISION APPROVAL:** Contracts written with the State of Utah, as a result of this proposal, will not be legally binding without the written approval of the Director of the DIVISION.
- 8. AWARD OF CONTRACT: (a) The contract will be awarded with reasonable promptness, by written notice, to the lowest responsible offeror whose proposal is determined to be the most advantageous to the state, taking into consideration price and evaluation factors set forth in the RFP. No other factors or criteria will be used in the evaluation. The contract file shall contain the basis on which the award is made. Refer to Utah Code Annotated 65-56-21. (b) The DIVISION can reject any and all proposals. And it can waive any informality, or technicality in any proposal received, if the DIVISION believes it would serve the best interests of the state. (c) Before, or after, the award of a contract the DIVISION has the right to inspect the offeror's premises and all business records to determine the offeror's ability to meet contract requirements. (d) The DIVISION will open proposals publicly, identifying only the names of the offerors. Proposals and modifications shall be time stamped upon receipt and held in a secure place until the due date. After the due date, a **register** of proposals shall be established. The **register** shall be open to public inspection, but the proposals will be seen only by authorized DIVISION staff and those selected by DIVISION to evaluate the proposals. The proposal(s) of the successful offeror(s) shall be open for public inspection for 90 days after the award of the contract(s). (e) Utah has a reciprocal preference law which will be applied against bidders bidding products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, <u>Utah Code Annotated</u>.
- 9. **ANTI-DISCRIMINATION ACT:** The offeror agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also offeror agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.
- 10. **WARRANTY:** The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the

product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

- 11. **DEBARMENT:** The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.
- 12. **GOVERNING LAWS AND REGULATIONS:** All State purchases are subject to the Utah Procurement Code, Title 63, Chapter 56 <u>Utah Code Annotated 1953</u>, as amended, and the Procurement Rules as adopted by the Utah State Procurement Policy Board (<u>Utah Administrative Code</u> Section R33). These are available on the Internet at www.purchasing.state.ut.us.

(Revision 2/14/2000 - RFP.Instructions)

# Request for Statement of Interest (SOI) – Bid Number NO3008 for a TMDL Water Quality Study of Echo Reservoir

## **Purpose and Intent**

The Utah Division of Water Quality is requesting proposals from engineering and environmental consulting firms to complete a water quality study that addresses water quality impairments and establish acceptable Total Maximum Daily Loads (TMDLs) for submission to EPA by the Division. This will include detailed recommendations to remedy all water quality impairments as well as preparation of project implementation plans (PIPs) containing solutions and best management practices (BMPs) for pollution sources in the watersheds that flow into Echo Reservoir. The Division of Water Quality will evaluate and rank each Statement of Interest (SOI) based on the evaluation criteria outlined in this request and will negotiate a contract with the firm who submits the highest ranking SOI.

## **Background Information**

Echo Reservoir is located in the Weber River watershed near the town of Coalville Utah. (HUC 16020101). The beneficial uses identified for Echo Reservoir are: 1C (domestic water supply), 2A (primary contact recreation), 2B (secondary contact recreation), 3A (coldwater fishery), and 4 (agriculture). Echo Reservoir is listed on the 2000 303d list for waters requiring the development of Total Maximum Daily Loads (TMDLs). The cause of impairment in the reservoir is identified as excess total phosphorus and low dissolved oxygen.

The pollutant loads produced by point and non-point sources will need to be developed for each TMDL. Applicants are encouraged to utilize their knowledge of the contributing watershed and existing data to assist the Division in determining specific sources and contributing areas of pollution for improvement of water quality in the basin. This will include not only an evaluation of current conditions, but a projection of future conditions in the watershed.

#### **Work Elements and Deliverables**

1. Compile, review, validate and evaluate all existing surface and ground water quality data and information. Acquire existing GIS data related to the water quality impairments identified. Compile available flow data from USFWS, USGS, DEQ,DNR,BLM, USFS, BOR, private water companies and other sources with applicable monitoring programs. Identify methods or protocols to be used and determine any gaps in the data needed for use in this assessment.

- a) A written characterization and evaluation of the water quality, flow and GIS data for the watershed.
- b) Tables showing actual data, where data was obtained, dates of data collection, and any gaps in data. Narrative describing any additional data needs. Data will be provided both in printed and electronic form.
- c) Statistical assessment of data, such as number of samples, means, median, and variance included for each monitoring station and for the overall data set. This must include a seasonal analysis to identify seasonal variations.
- *d)* Recommendations for any supplemental monitoring that is needed to complete the remaining work elements.

Note: Work Element #1 will be completed within the first 60 days of the contract in order to allow for supplemental sampling of water quality and or flow to occur if needed.

2. Identify and characterize all significant causes and sources of point and non-point source pollution (including ground water inflows, urban runoff, storm water, and agricultural runoff) within the watersheds that have or are contributing to current water quality impairments.

- a) A written description and characterization of all significant pollutant causes and sources.
- b) A water budget for the basin including any future contributions from transbasin diversions, water rights issues, major diversions to include issues from the State Engineers office regarding water rights. In establishing basin hydrology, a review of any hydrologic modeling developed by the Division of Water Resources or the State Engineers office should be included.
- c) Sources may be categorized (e.g. agricultural, urban runoff, et.al.) but review and approval of categorization will need to be obtained from DWQ staff. When categories are used sufficient resolution of specific contributions will need to be verified in the field to support the data obtained (e.g. animal feeding operations or riparian site conditions). Identify the sources of information used along with results obtained in completing data compilation and analysis for each significant source.
- d) Lined and unlined canals, flood irrigated land, sprinkler irrigated land, soils prone to flooding and erosion, and oil and gas development.
- e) GIS map coverages identifying major land uses and all significant sources of point and non-point source pollution.
- f) Written description of the data, methods, and calculations used to determine significant sources.

- g) GIS map coverage identifying basin hydrology including streams, canals and major irrigation pathways.
- h) Recommendations for field surveys to collect supplemental source characterization information and a description of the approach, methodology and commitment of time to acquire additional information.
- 3. Calculate the seasonal and annual loadings for parameters of concern from all sources entering Echo Reservoir. Quantify where loading data is available or provide a logical estimation where data is limited or not available (e.g. modeling to determine loading from animal wastes; number of animals, distance from live water, export coefficients, etc.).

## **Deliverables**

- a) Tabulated results of loading calculations for each significant source and each regular DWQ monitoring point in the watershed.
- b) Methodology for calculation of pollution loads from point and non-point sources. If modeling is proposed, a thorough description of the model software used, inputs, assumptions and outputs must be included and approved by DWQ.
- c) Written description of the data sources, methods, and calculations used to compile point and non-point source loadings.
- d) Electronic and hard copies of all data, calculations, and results utilized for loading estimates.
- e) Copies of publications and methods used as a basis to estimate loading where insufficient data exists.
- 4. Determine the location of each identifiable point and non-point source of pollution as specifically as possible.

- a) Written listing of sources/source areas, locations, and ownership with as much specificity as possible to describe the associated point and non-point source pollution. This may include identification of all significant animal feeding areas that are sources of nutrients, unstable or degraded streambanks, stormwater discharge points or other identifiable sources.
- b) GIS map coverage showing sites identified in the above list of source and source areas.
- 5. Identify probable future sources of pollution as a function of land use changes such as development, mining, etc. Project any additional loading that would be associated with these additional sources and propose measures to avoid or minimize these loads.

## **Deliverables**

- a) GIS map coverage showing projected land use changes or projected changes associated with sites of point and non-point source pollution.
- b) Calculation of future pollution loading potential with written description of basis, methods, calculations, and tabular estimates of loading anticipated.
- c) Written recommendations for measures (BMPs, BATs, zoning ordinances, etc) to avoid or minimize the anticipated additional point and non-point source pollution loads identified in this element.
- 6. Identify Best Management Practices (BMPs) or Best Available Technology (BAT) that will eliminate or minimize current loadings from point and non-point sources identified in Element 4. Prepare a Project Implementation Plan (PIP) suitable for use in securing EPA 319 or other applicable project funding and to direct implementation of BMP or BAT control measures. Develop a prioritization schedule for project implementation based upon potential source reductions, feasibility of implementation, cost, effectiveness, etc.

#### **Deliverables**

- a) Written prescription of recommended BMPs or BATs on a sub-watershed or waterbody basis to achieve water quality goals identified in this scope of work.
- b) Estimated costs for installation, operation, and maintenance of each BMP or BAT recommended, presented in tabular form.
- c) Project Implementation Plan (PIP) with detailed written description of how each BMP or BAT considered should be implemented and the assessment of its applicability. Describe the effectiveness towards the reduction of current or future pollutant loading. The written description shall include a complete reference for the information and any articles that describe the effectiveness of the BMP or BAT. The PIP shall have sufficient detail, such as BMP costs, effectiveness of BMP, and pollutant loading reduction levels, for the anticipated funding source to implement the proposed BMPs or BATs identified as needed (see appendix B). The PIP shall be a stand-alone chapter or appendix with all essential elements.
- 7. Quantify reductions in loading that should be achieved upon implementation of each BMP or BAT listed in Work Element No. 6.

#### **Deliverables**

a) Written description of methods, calculations, and basis used to calculate expected load reductions from implementation of the BMPs or BATs identified in the PIP.

- b) Tabular output of expected load reductions calculated for each BMP or BAT recommended for each significant source and for the entire watershed area.
- 8. Using point and non-point source pollution information and under the Division's guidance and in conjunction with local watershed steering committees, prepare a draft TMDL Technical Report that conforms to EPA requirements. Make recommendations to the Division for establishment of endpoints or targets that will achieve water quality compliance and restore beneficial uses to the watershed based on existing criteria or recommended site specific criteria. The Utah Division of Water Quality will determine the criteria. This work will be supported by a complete technical analysis to include: modeling (as needed); assessment necessary to support recommendations for selection of endpoints; pollution load reductions; and allocation of loads to the various sources in the watershed. The technical analysis must include a linkage analysis to demonstrate the relationship between impairments, sources, water quality endpoints and proposed load reduction (e.g. if dissolved oxygen level increases are projected with reduction of nutrients, supportive evidence will need to be supplied to justify the linkage involved). If modeling is used, a complete description of the model, any software used, inputs, assumptions and outputs must be provided in the draft and final reports.

#### **Deliverables**

- a) The TMDL analysis will be a stand alone appendix of the report with all the essential elements required by EPA for approval of a TMDL. The attached format (appendix A) is an outline for the report.
- 9. Assist the DWQ watershed coordinator in presenting information, findings, analysis, and recommendations from the contract work to local watershed steering committees, technical advisory committees, workgroups, and Division managers throughout the duration and at the end of the project as needed or warranted.

- a) The contractor shall attend the regular meetings of the Watershed Steering Committee during the contract period to provide updates and briefings from the contract work as requested by the Division. The minimum number of presentations shall be three (3) and the maximum shall be five (5).
- b) The contractor shall attend at least two (2) public outreach meetings associated with the TMDL developed for Echo Reservoir. Participation in public outreach meetings may involve preparing materials and making a presentation to explain the contract work and results.

## **Report Outputs**

## **Data Evaluation Report**

The contractor shall provide a written report to the Division that includes all deliverables and fullfills work element # 1 within 60 days of the starting date of the contract. Electronic format for draft and final reports will be in Microsoft WORD.

#### **Draft Report**

The contractor shall provide a written draft report that includes the deliverables identified for each work element. The report will include a chapter or appendix specifically addressing TMDL requirements for submission to US EPA as outlined in work element #9. The report will also include a chapter or appendix specifically addressing PIP requirements for BMP/BAT control of all sources of significant pollutant contributions. The report shall include GIS maps of the watershed (along with electronic copies of the data layers in ArcView shapefile format). The maps shall include, at a minimum:

- a) Overall Watershed boundary with sub-watershed boundaries delineated.
- b) All water bodies in the watershed (streams, lakes, ponds, significant previously delineated wetlands).
- c) Major political boundaries (City and County).
- d) Major roads and highways.
- e) General topography.
- f) Soils and vegetation information (as available).
- g) Surficial geology, land forms, (flood plains, terraces, upland) hydrology, channel type and conditions, land uses, and major storm water systems and discharge locations.
- h) Water quality data for each monitoring site in the watershed.
- i) Each of the map coverages identified in the work elements.
- j) Sites identified as significant sources of the pollutant of concern not shown on other maps (e.g. CAFO/AFO's, other animal feeding areas, and point sources).

The report will also include a spreadsheet in Excel format with all of the data and analysis utilized for this report. The contractor shall provide three (15) written copies and one (1) electronic copy (CD) of the draft report for review to the Division by **September 15, 2003**.

#### **Final Report**

Upon Division approval of the revisions to the draft report, the contractor shall provide a master copy of the final report in both electronic format (CD) and hard copy suitable for monochrome duplication along with 30 copies of the final report incorporating all elements of the draft report with suggested changes and modifications provided from the Division's review of the draft. Any changes needed to GIS or electronic information identified in the Division's review of the Draft Report shall be modified to

meet the comments from the Division and provided in the Final Report. The final report and all associated materials required to complete the work elements described herein shall be provided to the Division by **November 15, 2003**.

All information, reports, maps, tables, data, and supporting documents shall become property of the Division upon delivery.

#### **Cost Reimbursements**

- 1. The contractor shall submit monthly billing statements to the Division for payment of actual costs incurred for work required in this contract.
- 2. The Division may authorize payment of the billed amount up to a maximum of 60% of the total contract amount prior to submission of the draft report.
- 3. Upon the contractors fulfillment of the draft report requirements, the Division may authorize payment of up to 80% of the contract.
- 4. Upon the contractors satisfactory fulfillment of the final report requirements, the Division may authorize payment of any remaining balance (20%) up to the total contract amount.

#### **Monthly Status reports**

The contractor shall submit written monthly status reports with the monthly billing that describes the work completed in the preceding month. The report will identify the progress made to date on each of the nine (9) work elements and the draft and final reports.

#### **Field Work Expectation**

Work Elements 2, 4, and 5 will require "on the ground" field work to adequately complete the necessary deliverables. Prospective contractors should anticipate a minimum of one full week of field work in addition to the "on site" presence needed for the 3-5 watershed stakeholder meetings and public outreach meetings required in work element 9.

#### **Proposal content**

Each proposal shall not exceed 40 typed pages and contain at a minimum, the following elements:

- 1. Identification of the contractor and qualifications
  - -Name of firm
  - -Office location (s)
  - -Description of firm's general background and capabilities
- 2. Experience information
  - -Description of the specific Lake and Reservoir TMDL projects, point and non-point source pollution projects, and closely related water quality projects that the contractor has worked on. This element shall include a contact person and phone number for each project that can verify work completed. An explanation of how each project relates to the

proposed work and the environmental issues specific to the geographic study area described under this RFP should also be included.

- 3. Description of the proposed project team
  - -This element shall include a detailed description of staff that will work on specific elements of the project, including their academic and professional credentials. Any sub-contractors that will be utilized must also be identified along with their credentials.
- 4. Description of approach and methodology

- -This element shall describe the proposed approach and methodology to be used to fulfill the work elements identified in this RFP. A description of how each work element will be accomplished should be provided.
- 5. Time Commitment
  - -This section shall itemize the number of hours proposed for each project member on each work element including the total hours committed to each work element.

## Please DO NOT include cost estimates or information as a part of the SOI proposal.

## **Key dates**

SOI Due Date and Time: September 24, 2002 @ 3:00 p.m.

Notification of Contract Award
Project start date:

Project completion date:

November 2002

November 15, 2003

#### **Administration Information**

Proposal Due Date, Time and Location

Four (4) copies of your written SOI must be received by September 24, 2002 @ 3:00 p.m. at:

State of Utah

Division of Purchasing and General Services

Room 3150 State Office Building, Capitol Hill

PO Box 1410161

Salt Lake City UT 84114-1061

## Late proposals will not be considered.

#### **Contract Term**

The contract start date will be within 15 days of contract award, through December 30, 2003

#### **Questions**

For technical content-related questions on Echo Reservoir you may contact John Whitehead, Utah Division of Water Quality, (801) 538-6053, FAX (801) 538-6016 Email <a href="mailto:jwhitehe@deq.state.ut.us">jwhitehe@deq.state.ut.us</a>.

For procurement questions you may contact Nancy Orton, Division of Purchasing and General Services, (801) 538-3148.

## **Proposal Evaluation Criteria**

## **Contract Terms:** (qualifying/disqualifying)

Firm is able to meet the terms and requirements of the contract.

1. Quality and suitability of written SOI package: (6%) (25 points possible)

Package is clear, concise, and responsive. (Weight = 5)

- 2. Scientific and Technical Content: (40%) (160 points possible)
  - a. Package shows an understanding of the goals of the OWNER. (weight = 7)
  - b. Package shows a sound overall understanding of the scope of work. Shows a working familiarity with the TMDL process and regulatory requirements needed to gain EPA and local stakeholder buy in and approval. (weight = 7)
  - c. Package shows an understanding of the watershed to be studied and the issues to be addressed by the study. (weight = 8)
  - d. Hours allocated for each work element reflect realistic understanding of the work elements, and needed staff time to adequately complete each work element. (weight = 10)
- 3. Specific Staff Experience: (27%) (105 points possible)
  - a. Academic qualifications of "directly involved staff" (i.e. staff that will actually be working on the project in more than just an "oversight" capacity) to complete TMDL water quality studies. (weight = 3)
  - b. Suitability and technical backgrounds of "directly involved staff" for this TMDL. (weight = 4)
  - c. Experience and expertise of "directly involved staff" in development of TMDL's that are topically and regionally similar to the TMDL(s) required in this study. (weight = 5)
- 4. BMP & BAT Experience and Expertise: (20%) (80 points possible)
  - a. Academic qualifications of "directly involved staff" to design and compile requisite Best Management Practices (BMPs) and Best Available Technology (BAT) for implementation of the TMDL recommendations. (weight = 10)
  - b. Direct experience and expertise in design and engineering of "directly involved staff" to develop BMP's and BAT needed for this TMDL. (weight = 10)
- **5.** Prior Experience with DWQ in TMDL Contracts: (6%) (25 points possible)
  - a. Prior contracting experience with DWQ for TMDL studies resulted in good quality and timely work products with minimal oversight from DWQ. (Firms with no prior TMDL contract experience with DWQ will score a 5 out of a possible 5 for this category)

## **SOI EVALUATION SCORESHEET**

Firm Name:  Evaluator:		Rating Points will be assigned as follows:							
		<u>.</u>	<ul> <li>0 = No response, no experience, not qualified</li> <li>1 = Minimal experience, mediocre quality</li> <li>3 = Moderate experience, good quality</li> <li>5 = Extensive experience, excellent quality</li> </ul>						
Da	ate:		5 = Extensive exp	enence. exce	ileni uuai	iitv			
				<b>SCOREW</b> (0-5)	<u>EIGHT</u>	POINTS			
1.	QUALITY AND SUITAB (25 points possible)	ILITY OF WRITTEN SO	OI PACKAGE		x 5				
2.	Scientific and Technic	al Content (160 points	possible)						
	<ul><li>a. Understanding of DW</li><li>b. Understanding of Sc</li><li>c. Understanding of wat</li><li>d. Realistic allocation of</li></ul>	ope of Work and TMDL ershed(s) and issues			x7 x7 x8 x10				
3.	Specific Staff Experience (105 points possible)								
	<ul><li>a. Academic qualification</li><li>b. Suitability of technica</li><li>c. Direct experience and</li></ul>	l backgrounds	rk		x 6 x 7 x 8				
4.	BMP & BAT Experienc	e & Expertise (80 poin	ts possible)						
	<ul><li>a. Academic qualification</li><li>b. Direct experience and</li></ul>		AT development	t	x 8 x 8				
5.	Prior Experience with I	DWQ TMDL Contracts	(25 points poss	ible)					
	Prior experience with     Poor prior experience	DWQ (No prior experience = 0, Good prior experience)			x 5				
	TOTAL EVALUATION F	POINTS (395 points pos	ssible)						

#### **APPENDIX A TMDL Guidelines & Format**

#### I. Introduction

A description of the waterbody and its associated watershed including maps as needed.

A discussion of impairment with maps with a statement of intent.

A discussion of the prioritization of the waterbody or justification, if the waterbody is not listed as a high priority.

- *This section could include such things as:* 
  - . waterbody name/ID number/HUC code/watershed description
  - . the geographic coverage of the TMDL and why this is an appropriate coverage
  - . the priority of the waterbody on the 303(d) list; if the waterbody/pollutant is not a "targeted" TMDL, discuss why it is now considered "targeted" and how the development of this TMDL will not disrupt the schedule for developing the "targeted" TMDLs.

#### II. Water Quality Standards

A discussion of associated impairment with respect to state water quality standards:

Narrative, Numeric Criteria, Antidegradation, or Beneficial Uses.

A discussion of the parameters of concern on the 303(d) listing.

## TMDLs result in maintaining and attaining water quality standards.

- This section should include description of all standards applicable to the impairment/threat for which the waterbody was listed on the 303(d) list. Further, it should include which components of the state/tribal standards are being implemented through this TMDL, including any numeric, narrative, antidegradation, and use classification components of the standards.
- Describe which uses and pollutants will be addressed through this TMDL; if there are other uses/pollutants of concern described on the 303(d) list that are <u>not</u> being addressed, a statement why they will be addressed at a later time.
- For a particular numeric aquatic life criteria, explain whether the acute and/or chronic standards are being implemented through the TMDL.

#### III. Water Quality Standards Target

A discussion of the quantifiable endpoints and how they relate to the achievement of pertinent water quality standards. Include a clarification of the endpoints related to averaging period associated with the endpoint.

Instantaneous readings for parameters

Dominance or seasonal endpoints (algae, macro-invertebrates)

Average values over a period of time (annual or seasonal loads)

## TMDLs have a quantified target or endpoint.

- This section provides an expression of what water quality standard(s) serve as a target for the TMDL. If the standard being used is not quantified, it should be translated into a site-specific quantifiable target or goal.
- *Examples of quantified endpoints related to aquatic life protection:* 
  - . numeric WQStnd =  $20 \mu g/l$  copper concentration/4 day average/ once in 3 years exceedence rate
  - . narrative WQStnd = no toxic discharges in toxic amounts as interpreted through whole effluent toxicity tests
  - . antidegradation WQstnd = no measurable increase in current concentrations of zinc
  - . use classification = no more than 15% fine sediment diameter < 0.85mm in riffle areas (aquatic life use)
- The TMDL "target" will be the value measured to judge success of the TMDL effort. It is recommended that more than one target be used.

## **IV.** Significant Sources

A discussion of all significant sources of pollutant(s).

## TMDLs must consider all significant sources of the stressor.

- This section identifies **all the pollutant sources** that contribute to the impairment or threat being addressed by the TMDL. The description should also discuss the causative factors that result in the impairment or threat (e.g., the sources of nutrients are irrigation return flow, a municipal treatment facility, and natural background; the shallow depth of the receiving stream along with the high temperatures and substrate type result in excessive algal blooms during the summer season; or, increased frequency and intensity of runoff from the watershed results in de-stabilization of the receiving stream)
- The identification of sources must be explicit for those sources that will need to be controlled to achieve the water quality standards; all other sources may be lumped into one term, with just a narrative description of the sources being included in that one term (e.g., the primary source of ammonia is the municipal treatment facility; background sources include nonpoint sources from agricultural activities.'
- *It is helpful to provide a distribution of the TMDL on a source-by-source basis.*

#### V. Technical Analysis

A discussion of the appropriate level of technical analysis needed to support the TMDL.

#### TMDLs are supported by an appropriate level of technical analysis.

■ The technical analysis should be detailed enough to explain why the pollution controls being suggested in the TMDL, once implemented, will achieve the TMDL <u>and</u> why the TMDL, once implemented, will achieve the water quality standard target. This "**linkage**" **analysis** between the

controls, the TMDL, and the WQStnds target will vary in rigor, depending upon the such things as the data available, the models used, the type of pollutant, and the types of pollutant sources.

■ TMDLs that address primarily nonpoint sources are often best professional estimates, base on modeling and/or monitoring results within the watershed whereas TMDLs that address primarily point sources have a more detailed analysis an expression of acceptable loads, based on modeling.

## VI. Margin of Safety & Seasonality

A discussion of the mechanism used to address uncertainty associated with the TMDL. Examples may include:

- -Future monitoring, interim endpoints indicative of the effectiveness of implementation, and mechanisms that would drive re-evaluation and refinement of TMDL endpoints.
- Conservative selection of endpoints to assure attainment of water quality standards.

A discussion of the seasonality impacts that may be associated with the TMDL. This discussion may be related to seasonal patterns occurring in the watershed, the monitoring strategy or data analysis, or the seasonality associated with BMP implementation.

TMDLs must contain a margin of safety and consider seasonality.

- Margins of safety can be explicit or implicit. In either case, an explanation should be included that explains why the MOS is reasonable to assure attainment of the water quality target.
- Implicit margins of safety include the use of conservative assumptions during the establishment of the 1) water quality standard target, 2) the TMDL, or 3) the water quality controls. Also, postimplementation monitoring related to the effectiveness of the TMDL controls can be used to assure attainment of the targets, using adaptive management during the implementation phase.
- The TMDL documentation should include a discussion of how seasonality was considered in development of the target, the TMDL, the allocation scheme, and/or the pollutant controls.

#### VII. TMDL

An estimate of the acceptable load or the degree to which the current pollutants (loads) need to be decreased to attain the defined endpoints.

Examples may include:

50% decrease in at risk stream banks 2,000 Kg/Yr decrease in total dissolved solids loading Increase in fish populations to 500 salmonids per mile

TMDLs include a quantified pollutant reduction target, but this target can be expressed in any appropriate manner.

- This section provides the TMDL, itself, either in terms of absolute load (e.g., 400 lbs/day of arsenic) or reduction in load or stressor (e.g., decrease in 3 miles of erodible streams banks).
- This value may or may not be measurable, but it should be quantified in a numerical expression. (e.g., an estimate of 60% reduction in long term sediment yield from a watershed is the TMDL, based on predictive modeling methods. This is quantified, but may not be monitored directly in the field.)
- The TMDL should be described in terms of applicable averaging period, season, and geographic location, if applicable. Averaging period most often relates back to the averaging period for the

water quality standard (e.g., 1 hour, 4 day, 30 day, seasonal, annual)

■ A description of the critical conditions upon which the TMDL is based (if any) (e.g., is this a TMDL based on critical low flow or high flow?)

#### VIII. Allocation

A rationale that addresses all sources and causes that are significant in the attainment of the TMDL endpoints/targets. Include the allocation of loads to those significant sources, a description of what controls will be applied, who will be responsible for applying them, and where and when they will be applied.

## TMDLs apportion responsibility for taking actions.

- The allocation of the TMDL is done on a source-by-source basis, with the "source" being defined in any number of ways as mentioned in the next bullet. The allocation can be expressed in terms such as absolute loading, a fraction of the % reduction, or a description of the how the various pollutant controls will be spatially allocated throughout the watershed (e.g., a map showing what controls will be applied within the watershed.) Again, not all sources have to have an individual allocation; only those sources that need to be controlled need an individual allocation; all other sources can be "lumped" into one allocation term.
- Allocations can be done on a basis that fits the particular pollutant/watershed. Examples include allocations done by: individual discharger, tributary/sub-watershed area, source category, land use category, land parcel.

## IX. Public Participation

Describe the stakeholder involvement and provide a widespread opportunity for review either by public notices, public meetings or posting of draft TMDL's on DEQ's website.

## TMDLs involve some level of public involvement or review.

- It is recommended that a the notification of the proposed TMDL be widely disseminated (e.g., newspapers, internet, etc.)
- Notifications or solicitations for comments regarding the TMDL should clearly identify the product as a TMDL and the fact that it will be submitted to EPA for review.
- When the TMDL is submitted to EPA for review, a copy of the comments received by the state should be also submitted to EPA.
- The public should be given the opportunity to be involved from the very beginning of the TMDL process.

#### APPENDIX B-PIP Guidelines/Format

#### TMDL Implementation Plan Outline

- I. <u>Executive Overview</u> Two to three page description of Implementation Plan summarizing BMP's and BAT that will be needed to achieve the endpoints of the TMDL. This should include estimates of costs and timeframes associated with each measure along with the net reductions in constituents of concern that will be achieved by implementing the measures proposed. Tables and bullet format should be used for this section.
- II. <u>Detailed List of BMP and/or BAT Alternatives</u> Description of each BMP/BAT evaluated for this TMDL Implementation including the effectiveness and associated costs. This section should include complete literature citations to support analysis, costs, and effectiveness for each BMP and BAT considered.
- III. <u>BMP and BAT Recommendation</u> Recommendation for the optimal combination of specific BMP's and BAT alternatives that are best suited for this TMDL Implementation. This section should include detailed support and analysis for the recommendation including considerations for cost, effectiveness, and local community acceptance.

#### ATTACHMENT A: STANDARD TERMS AND CONDITIONS

<u>AUTHORITY</u>: Provisions of this contract are pursuant to the authority set forth in 63-56, <u>Utah Code Annotated</u>, 1953, as amended, Utah State Procurement Rules (<u>Utah Administrative Code</u> Section R33), and related statutes which permit the STATE to purchase certain specified services, and other approved purchases for the STATE.

<u>CONTRACT JURISDICTION</u>, <u>CHOICE OF LAW</u>, <u>AND VENUE</u>: The provisions of this contract shall be governed by the laws of the State of Utah. The parties will submit to the jurisdiction of the courts of the State of Utah for any dispute arising out of this Contract or the breach thereof. Venue shall be in Salt Lake City, in the Third Judicial District Court for Salt Lake County.

<u>LAWS AND REGULATIONS</u>: Any and all supplies, services and equipment furnished will comply fully with all applicable Federal and State laws and regulations.

<u>RECORDS ADMINISTRATION</u>: The CONTRACTOR shall maintain, or supervise the maintenance of all records necessary to properly account for the payments made to the CONTRACTOR for costs authorized by this contract. These records shall be retained by the CONTRACTOR for at least four years after the contract terminates, or until all audits initiated within the four years, have been completed, whichever is later. The CONTRACTOR agrees to allow STATE and Federal auditors, and STATE Agency Staff, access to all the records to this contract, for audit and inspection, and monitoring of services. Such access will be during normal business hours, or by appointment.

<u>CONFLICT OF INTEREST</u>: CONTRACTOR represents that none of its officers or employees are officers or employees of the State of Utah, unless disclosure has been made in accordance with 67-16-8, <u>Utah Code Annotated</u>, 1953, as amended.

<u>CONTRACTOR</u>, AN <u>INDEPENDENT CONTRACTOR</u>: The CONTRACTOR shall be an independent contractor, and as such, shall have no authorization, express or implied, to bind the STATE to any agreements, settlements, liability, or understanding whatsoever, and agrees not to perform any acts as agent for the STATE, except as herein expressly set forth. Compensation stated herein shall be the total amount payable to the CONTRACTOR by the STATE. The CONTRACTOR shall be responsible for the payment of all income tax and social security amounts due as a result of payments received from the STATE for these contract services. Persons employed by the STATE and acting under the direction of the STATE shall not be deemed to be employees or agents of the CONTRACTOR.

INDEMNITY CLAUSE: The CONTRACTOR agrees to indemnify, save harmless, and release the STATE OF UTAH, and all its officers, agents, volunteers, and employees from and against any and all loss, damages, injury, liability, suits, and proceedings arising out of the performance of this contract which are caused in whole or in part by the negligence of the CONTRACTOR'S officers, agents, volunteers, or employees, but not for claims arising from the State's sole negligence.

EQUAL OPPORTUNITY CLAUSE: The CONTRACTOR agrees to abide by the provisions of Title VI and VII of the Civil Rights Act of 1964 (42USC 2000e) which prohibits discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age; and Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990 which prohibits discrimination on the basis of disabilities. Also, the CONTRACTOR agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the work place.

<u>SEPARABILITY CLAUSE</u>: A declaration by any court, or any other binding legal source, that any provision of this contract is illegal and void shall not affect the legality and enforceability of any other provision of this contract, unless the provisions are mutually dependent.

<u>RENEGOTIATION OR MODIFICATIONS</u>: This contract may be amended, modified, or supplemented only by written amendment to the contract, executed by the parties hereto, and attached to the original signed copy of the contract.

<u>DEBARMENT</u>: The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract), by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.

<u>TERMINATION</u>: Unless otherwise stated in the Special Terms and Conditions, this contract may be terminated, with cause by either party, in advance of the specified termination date, upon written notice being given by the other party. The party in violation will be given ten (10) working days after notification to correct and cease the violations, after which the contract may be terminated for cause. This contract may be terminated without cause, in advance of the specified expiration date, by either party, upon 90 days prior written notice being given the other party. On termination of this contract, all accounts and payments will be processed according to the financial arrangements set forth herein for approved services rendered to date of termination.

<u>SALES TAX EXEMPTION</u>: The State of Utah's sales and use tax exemption number is E33399. The tangible personal property or services being purchased are being paid from State funds and used in the exercise of that entity's essential functions. If the items being purchased are construction materials, they will be converted into real property by employees of this government entity, unless otherwise stated in the contract.

<u>WARRANTY:</u> The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah apply to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless

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otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

<u>PUBLIC INFORMATION:</u> Contractor agrees that the contract will be a public document, as to distribution of copies, and Contractor gives the STATE express permission to make copies of the contract and/or of the response to the solicitation in accordance with the State of Utah Government Records Access and Management Act. The permission to make copies as noted will take precedence over any statements of confidentiality, proprietary information, copyright information, or similar notation. (Revision date: Apr 24, 2002)